

**REMARKS**

Upon entry of this amendment, claims 1-46, 48, 50-52 and 55-97 are all the claims pending in the application. Claims 53 and 54 are canceled by this amendment. Claims 55-97 are added as new claims. No new matter has been added.

**I. Claim Objections**

The Examiner has objected to claim 4 under 37 C.F.R. § 1.75(c) as being of improper form for failing to further limit the subject matter of a previous claim. The Examiner asserts that claim 4 is a method claim which depends from claim 1 which claims an apparatus. Applicant respectfully disagrees.

The format in which claim 4 has been drafted has been an acceptable format for years, as a shorthand way of rewriting all of the limitations from a previous claim. The Board of Patent Appeals and Interferences affirmed this manner of drafting claims in the case of *Ex parte Porter*, 25 USPQ2d 1144 (BPAI 1992). In that case, claim 7 was directed to "A nozzle", whereas dependent claim 6 was directed to "A method for unloading ... which comprises utilizing the nozzle of claim 7."

The Board found proper dependency because the dependent claim incorporated by reference all of the subject matter of another claim. That is, the dependent claim was not broader in any respect than the independent claim. Therefore, because claim 4 in the present application includes all of the subject matter of base claim 1, claim 4 is not broader in any respect than the claim to which it refers, and is therefore of proper dependent form.

Further, as stated in the Infringement Test under MPEP §608.01(n)(III), the test as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends (35 U.S.C. § 112, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim. Accordingly, as claim 4 cannot be infringed without also infringing base claim 1, Applicant submits that claim 4 is a proper dependent claim, and kindly requests that the Examiner reconsider and withdraw the objection.

## **II. Claim Rejections under 35 U.S.C. § 103(a)**

A. Claims 1-5, 16, 21-24, 26-29, 31-51 and 53-54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and Matsuzaki (U.S. Patent No. 5,900,694). Applicant respectfully traverses this rejection on the following basis.

Regarding claims 1 and 46, the Examiner recognizes that neither Asano nor Amemiya teaches the feature of a single sustain electrode provided in common for a first and second pixel cell adjacent to each other in a column direction. Nonetheless, the Examiner asserts that one of ordinary skill in the art would have been motivated to combine the teaching of Matsuzaki with the teachings of Asano and Amemiya to arrive at the claimed invention. Applicant respectfully disagrees.

Matsuzaki discloses a gas discharge display panel wherein portions close to the display cells are coated with patterns formed by an opaque material such as bus electrodes to thereby

improve the contrast (see col. 3, lines 20-25). As shown in Fig. 6, Matsuzaki discloses a main discharge electrode 19 which is provided over two cell columns. Although the surface area of the opaque material patterns is larger and the contrast is greater as compared with Fig. 1 of Matsuzaki, the surface area of the display cell 300 remains unchanged (see col. 3, lines 17-20).

As discussed above, Matsuzaki is characterized by covering portions near the display cells with the bus electrodes made of an opaque material. Therefore, Matsuzaki teaches away from the claimed feature of display electrodes having a notched or cut-away portion. That is, as Fig. 6 of Matsuzaki teaches a structure wherein contrast is improved by coating the portions close to the display cells with the bus electrodes, this structure teaches away from forming display electrodes having a notched or cut-away portion, as set forth in the claimed invention.

Thus, because a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention, Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to combine Matsuzaki with Asano and Amemiya, as has been suggested by the Examiner (see MPEP 2141.02).

Further, Applicant submits that there is no motivation for arbitrarily selecting the electrode from Matsuzaki which extends over two display cell lines and combining it with Asano and Amemiya. In analyzing the issue of motivation to combine, the reference must be considered as a whole.

The Examiner, however, has selected only one feature from the entire display panel of Matsuzaki, to the exclusion of the remaining features. However, there is simply no support in any of the applied references for selectively picking and choosing features in this way. It is only

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after having the benefit of Applicants' own disclosure that one is able to selectively separate features from Matsuzaki in an attempt to piece together Applicants' claimed combination.

Indeed, merely establishing that each element of a claimed combination was known in the prior art is not dispositive of patentability. The Examiner has provided no evidence that would have led a person of ordinary skill in the art to combine the teachings of Matsuzaki with the teachings of Asano and Amemiya to arrive at the claimed combination.

The proper standard requires the presence of a specific teaching or motivation to combine references such that the claimed combination would have been obvious to one skilled in the art. Applicant respectfully submits that the presence of such a teaching or motivation to arrive at the claimed combination is wholly absent.

In view of at least the foregoing, Applicant respectfully submits that claims 1 and 46 are patentable over the applied art, and the Examiner is kindly requested to reconsider and allow the claims.

Claims 2-5, 16, 21-24, 26-29 and 31-45 depend, either directly or indirectly, from claim 1. Claims 48, 50 and 51 depend, either directly or indirectly, from independent claim 46. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency. Claims 53 and 54 are canceled by this amendment.

In addition, claims 33 and 34 set forth the feature of scan electrodes and sustain electrodes of neighboring pixel cells overlapping each other being electrically insulated. The Examiner, however, has not addressed this feature of the claimed invention. Indeed, Applicant

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submits that none of the applied references even remotely suggests such a feature. If the Examiner persists in this rejection, Applicant requests that the Examiner particularly point out the structure in the applied art which corresponds to the above discussed feature.

Further, claim 36 sets forth the feature of a sustain electrode having a portion, reduced in width, for connecting to the sustain-side bus electrode. The Examiner has not specifically addressed this feature of the claimed invention. Applicant respectfully submits that none of the applied prior art teaches or suggests such a feature. Again, if the Examiner persists in this rejection, Applicant requests that the Examiner particularly point out the structure that is being relied upon.

In addition, regarding claims 38-42, Applicant submits that the applied prior art fails to teach or suggest the claimed feature of black stripes as specifically set forth in these claims. Accordingly, Applicant requests that the Examiner identify the structure in the applied art which is being relied upon as teaching each of the features set forth in claims 38-42.

B. Claims 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and Matsuzaki (U.S. Patent No. 5,900,694) and further in view of Nakajima (U.S. Patent No. 5,557,168).

Applicant submits that the deficiencies discussed above regarding Asano, Amemiya and Matsuzaki are not overcome by Nakajima. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

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C. Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and Matsuzaki (U.S. Patent No. 5,900,694) and further in view of Tanabe (U.S. Patent No. 5,889,365).

Applicant submits that the deficiencies discussed above regarding Asano, Amemiya and Matsuzaki are not overcome by Tanabe. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

D. Claims 11-15 and 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and Matsuzaki (U.S. Patent No. 5,900,694) and Nakajima (U.S. Patent No. 5,939,828) and further in view of Matsuzaki (U.S. Patent No. 5,939,828).

Applicant submits that the deficiencies discussed above regarding Asano, Amemiya and Matsuzaki are not overcome by Nakajima or Matsuzaki ('828). Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

E. Claims 20, 25 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) in view of Matsuzaki (U.S. Patent No. 5,900,694) and Nakajima (U.S. Patent No. 5,939,828) and further in view of Fukuta (U.S. Patent No. 6,037,713).

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Applicant submits that the deficiencies discussed above regarding Asano, Amemiya and Matsuzaki are not overcome by Nakajima or Fukuta. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

F. Claim 52 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068). Applicant respectfully traverses this rejection on the following basis.

Claim 52 recites that for neighboring pixel cells in the column direction, sustain electrodes and scan electrodes are disposed so as to allow respective sustain electrodes and scan electrodes to be adjacent to each other. Applicant submits that the cited prior art fails to teach or suggest at least this feature of claim 52.

The Examiner recognizes that Asano does not teach or suggest this feature of claim 52. In an attempt to cure this deficiency, the Examiner applies Amemiya and asserts that Amemiya teaches such a feature. In particular, in the Response to Arguments section, the Examiner states that Amemiya discloses a configuration which disposes electrodes so as to allow sustain electrodes and scan electrodes to be adjacent to each other between neighboring cells. Applicant respectfully submits that the Examiner is mischaracterizing the claimed invention.

Contrary to the assertion of the Examiner, claim 52 does not merely recite sustain electrodes and scan electrodes disposed so as to be adjacent to each other between neighboring pixel cells. Rather, claim 52 requires that for neighboring pixel cells in the column direction,

sustain electrodes and scan electrodes are disposed so as to allow respective sustain electrodes and scan electrodes to be adjacent to each other.

Thus, claim 52 requires that sustain electrodes be adjacent to one another between neighboring pixel cells in a column direction and that scan electrodes also be adjacent to one another between neighboring pixel cells in a column direction. Contrary to the assertion of the Examiner, Applicant submits that Amemiya fails to teach or suggest such features.

Applicant presumes that the Examiner is equating the projections of the Xi electrode of Amemiya to the scan electrodes and the projections of the Yi electrode of Amemiya to the sustain electrodes (or vice-versa). As the Xi electrode and the Yi electrode extend in the row direction, it is clear that the projections of the Xi electrode and the Yi electrode extend in the column direction.

Therefore, while a projection of the Xi electrode may be considered to be adjacent in a row direction to a respective projection of the Xi electrode, there is no teaching of a projection of the Xi electrode being adjacent to a respective projection of an Xi electrode between neighboring pixel cells in a column direction (or a projection of the Yi electrode being adjacent to a projection of a respective Yi electrode between neighboring pixel cells in the column direction).

Rather, Amemiya teaches precisely the opposite configuration. That is, Amemiya teaches that a projection of an Xi electrode will be adjacent to a projection of a Yi electrode between neighboring pixel cells in a column direction.



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Based on the foregoing, Applicant respectfully submits that the combination of Asano and Amemiya fails to teach or suggest all of the features of claim 52. If the Examiner persists in this rejection, Applicant kindly requests that the Examiner provide support for the above discussed feature so that Applicant may make an informed decision with regard to appeal.

#### **IV. New Claims**

Claims 55-97 are added as new claims. Claims 55-97 depend, either directly or indirectly, from independent claim 52. Accordingly, Applicant submits that claims 55-97 are patentable at least by virtue of their dependency for the reasons discussed above.

#### **V. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



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